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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,728

06/06/2007

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11138-024

9933

757 7590 04/14/2009
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EXAMINER

DRIGGERS-FOURNET, GWENDOLYN

ART UNIT

PAPER NUMBER

4127

MAIL DATE

DELIVERY MODE

04/14/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,728	Applicant(s) SALOMON-BAHLS ET AL.	
	Examiner Gwendolyn FOURNET	Art Unit 4127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/07/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is a first office action on the merits. Claims 1-16, as amended, are currently pending and have been considered below.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because many of the reference numerals are illegible. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 30. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because in figure 6, the indicator line for reference numeral 60 does not extend to the object it represents. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:

the specification is replete with drawing references which share the same name, for instance on page 5, lines 2 and 8 refer to “plug socket” for reference numerals (4) and (9), on page 7 line 13, and page 10, line 16 refer to “snap-action positive fit connection” for reference numerals (26) and (64), and on page 8, line 2 and page 9 line 21, refer to “holding element” for reference numerals (14) and (50); and

on page 11 lines 1-2, the recitation “adjoining part 62” should be changed to read --joining part (62)--.

Appropriate correction is required.

Claim Objections

6. Claim 10 is objected to because of the following informalities: the recitation “the two groups of in each case comprise” should be changed to read --the two groups, in each case, comprise--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 5 and 8-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 fails to state which claim it further limits.

In claim 10, the recitation “via a cylindrical fluid-sealing section” renders the claim indefinite since it is unclear how the depressions are distributed by means of the fluid

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sealing section. Examiner will interpret this to mean that depressions are spaced circumferentially around the fitting.

Claim 11 is rejected as being dependent from a rejected claim.

9. Claim 8 recites the limitation "the plug-in direction" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claims 9-14 are rejected as being dependent from a rejected claim.

10. Claim 8 is rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

Claims 9-14 are rejected as being dependent from a rejected claim.

11. Regarding claims 15 and 16, the word "means" is preceded by the word(s) "further comprising" and "characterized in that" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Ezura (US 2003/0178846).

Regarding claim 1, Ezura discloses a plug connector (10) for fluid conduits ([0002] which discloses use with a fluid tube), comprising a housing part (12) with a plug socket (figure 3, the open area of body (12) defined near (32a) and (32b)) for the fluid-tight insertion of a tubular plug-in part (36), a holding element (52) for locking and a fluid seal (42) for sealing the inserted plug-in part being arranged in the plug socket (see figure 3), the housing part being in two parts comprising a base part (12) and an insert part (58) which is connected to the base part via a snap-action positive fit connection (50), the base part comprising a receiving part (12) for the holding element, the fluid seal and the insert part, and a joining part (18) for the joining connection of the housing part to a fluid conduit ([0004] which discloses coupling of fluid tube to pressure apparatus).

Regarding claim 2, Ezura further discloses the receiving part and the joining part are connected to each other via a snap-action positive fit connection (20).

Regarding claim 3, Ezura further discloses an annular gap (figure 3, gap between connecting member (18) and body (12) near reference numeral (22)) between the receiving part and the joining part is sealed off in a fluid-tight manner via a seal (22) (see figure 3).

Regarding claim 5, Ezura further discloses the receiving part is formed of plastic material ([0030] which discloses joint body (12) as plastic) and the joining part is formed of metal ([0031] lines 1-2 which disclose connecting member (18) as metal).

Regarding claim 6, Ezura further discloses the holding element is a slotted (56), radially elastic ([0037] line 2) clamping ring (see figure 4) which interacts with an internal cone (figure 4, portion at the left end of (58) near reference numeral (60)) in the plug socket (see figure 3) to lock the plug-in part ([0040] describes fluid tube (36) prevented from detachment via fastening section (54) of chuck (52), the internal cone being formed in the insert part (see figure 3).

Regarding claim 7, Ezura further discloses the fluid seal is arranged in an annular chamber (32b) between one of the base parts or the receiving part and the insert part (see figure 3).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

16. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ezura (US 2003/0178846) as applied to claim 1 above, and further in view of Hosono et al (US 6,447,019).

Ezura discloses all the structural elements of the claimed invention as recited in claim 1, but fails to explicitly disclose the receiving part, with a consistently identical configuration, can be connected to a plurality of different configurations of the joining part.

However, Hosono discloses a tube joint having the receiving part (14), with a consistently identical configuration (figure 2), can be connected to a plurality of different configurations of the joining part (18) (see figure 2 which illustrates a cavity for receiving coupling member (18) in joint body (14) which is identical to that shown in Ezura, but where the coupling member includes a bush (52)).

Therefore, from the teachings of Hosono, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tube joint in Ezura to include a metal bush as taught by Hosono which maintains a strong

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connection while permitting the use of other coupling materials, such as plastic, since the fluid within the coupling does not come into contact with the metal bush.

17. Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezura (US 2003/0178846) as applied to claim 1 above, in view of Legris (US 4,431,216), and in further view of Woodling (US 3,649,050).

Regarding claim 8, Ezura discloses all the structural elements of the claimed invention as recited in claim 1, and the holding element for locking the inserted plug-in part and the fluid seal are arranged within the plug socket (see figure 3), as seen in the plug-in direction (figure 3 starting from the opening near reference numeral (62)), but fails to explicitly disclose a dirt seal on the a mouth side.

However, Legris discloses a tube fitting having a dirt seal (13) on a mouth side (see figure 13, opening near (13)).

Therefore, from the teachings of Legris, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tube joint in Ezura to include a dirt seal as taught by Legris as an obstacle to dirt and paint (column 8, lines 3-4).

The combination of Ezura and Legris fail to disclose a leakage path being formed in such a manner that, in a pre-locking position of the plug-in part, which position is locked by the holding element but is not yet sealed via the fluid seal, a physically perceptible leakage path for fluid within the housing part is defined.

However, Woodling discloses a tube fitting connection having a leakage path (25) being formed in such a manner that, in a pre-locking position of the plug-in part, which position is locked by the holding element but is not yet sealed via the fluid seal, a physically perceptible leakage path for fluid within the housing part is defined (column 4, lines 27-31, which disclose escape of fluid to the outside of the fitting via slots (25), and see figure 1 which shows the positioning of sleeve (12) within nut (14)).

Therefore, from the teachings of Woodling, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tube joint of the combination of Ezura and Legris to include flare slots on the plug-in part as taught by Woodling in order to indicate when the fitting is not properly installed.

Regarding claim 9, the combination of Ezura, Legris and Woodling discloses all the structural elements of the claimed invention as recited in claim 8.

Woodling further discloses a tube fitting connection having the leakage path is formed by depressions (25) which are arranged on the outer circumference of the plug-in part (see figure 2) and, in the pre-locking position, are arranged in two groups (see figure 2).

Therefore, from the teachings of Woodling, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tube joint of the combination of Ezura and Legris to include flare slots on the plug-in part as taught by Woodling in order to indicate when the fitting is not properly installed.

Regarding claims 10-13, the combination of Ezura, Legris and Woodling discloses all the structural elements of the claimed invention as recited in claim 9.

In regard to claim 10, Woodling further discloses a tube fitting connection having the depressions in the two groups in each case comprise a plurality of depressions (see figure 2) which are distributed over the circumference (see figure 2) and are spaced apart axially (see figure 2) via a cylindrical fluid-sealing section (see figure 2 which illustrates depression spaced circumferentially around the fitting).

In regard to claim 11, Woodling further discloses a tube fitting having a cylindrical dirt-sealing section adjoins the depressions (see figure 1 where nut (14) overlaps tube (11) and sleeve (12)) which are situated away from a front plug-in end (figure 5 near (44)) of the plug-in part (12)).

In regard to claim 12, Woodling further discloses a tube fitting connection having the depressions start from the front plug-in end of the plug-in part (see figure 7 which illustrates depressions (25) near the portion of plug-in part (12) that is inserted into the coupling as shown in figure 1).

In regard to claim 13, Woodling further discloses a tube fitting connection having depressions each with an elongate, generally rectangular shape oriented in the plug-in direction (see figure 2).

Therefore, from the teachings of Woodling, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tube joint

of the combination of Ezura and Legris to include flare slots on the plug-in part as taught by Woodling in order to indicate when the fitting is not properly installed.

Regarding claim 14, the combination of Ezura, Legris and Woodling discloses an axial distance between fluid seal and dirt seal.

Woodling further discloses a tube fitting connection having axial center distance between the depressions (see figure 2).

Therefore, from the teachings of Woodling, it would have been obvious to one of ordinary skill in the art at the time of the invention to locate the depressions relative to the seals of the combination of Ezura and Legris at a corresponding axial distance in order to ensure proper function of the flare vents.

18. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezura (US 2003/0178846) as applied to claim 1 above, and in further view of Woodling (US 3,649,050).

Regarding claim 15, Ezura discloses all the structural elements of the claimed invention as recited in claim 1, but fails to explicitly disclose a means for securing the inserted plug-in part against rotation about the a plug axis and the means for the rotational securing of positive fit elements are formed in such a manner that the individual parts can be fitted axially but are secured against rotation relative to one another.

However, Woodling discloses a tube fitting connection having a means for securing the inserted plug-in part against rotation about the a plug axis (30) and

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that the means for the rotational securing of positive fit elements are formed in such a manner that the individual parts can be fitted axially but are secured against rotation relative to one another (figure 7 which shows tube (11) being received by sleeve (12) in an axial direction, and column 4, lines 15-22 which indicate scalloped edge preventing rotation).

Therefore, from the teachings of Woodling, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tube joint in Ezura to include a means for securing the inserted plug-in part against rotation as taught by Woodling in order to ensure better sealing (column 4, lines 20-22).

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Ezura (US 6,764,102) for coupling.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GWENDOLYN FOURNET whose telephone number is (571)270-5740. The examiner can normally be reached on Mon-Fri 7:30a-5:00p; alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynda Jasmin can be reached on (571)272-6782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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/GDF/
Examiner
Art Unit 4127

/Lynda Jasmin/
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